

In the Specification:

Please delete the paragraph beginning on page 8, lines 9 which starts with “FIG. 6 is a series of line drawings of rat forebrain.”

Please replace the paragraph on page 52, lines 2-14 of the specification with the following amended paragraph:

It has been previously described that implanted rat astrocytes migrate through layers of the brain (Andersson et al., 1993, Int. J. Dev. Neurosci. 11:555-568; Zhou et al., 1992, J. Comp. Neurol. 317:145-155) in a manner similar to the migration seen with implanted neural stem cell or with a transformed line of the neural stem cells (McKay, 1997, Science 276:66-71). In the present invention it has been discovered that MSCs migrated in a similar fashion. Donor cells were found in multiple areas of the brain, including the contralateral cortex. The cells persisted in the sites to which they migrated. The heaviest concentration of cells was found around the rostrocaudal axis in the striatum and along the corpus callosum. There were fewer cells in the cerebral cortex (~~Figure 6~~). Clusters of labeled cells were consistently observed in the temporal lobe regions at all time points examined. At day 72, fewer cells were found in the outlying cortical regions, an observation consistent with the apparent decrease in cell number between day 30 and 72 (Table 5).

Please replace the paragraph on page 52, lines 16-23 of the specification with the following amended paragraph:

Immunostaining of sections demonstrated that engrafted human MSCs were also detected throughout the brain (~~FIG. 6~~) when antibodies to HLA-ABC were used (FIG. 5, Panel b). Although human MSCs stained with antibodies to collagen I prior to implantation (FIG. 7, Panel a), no staining with the same antibodies was seen after implantation. Thus, the MSCs ceased synthesis of type I collagen after integration into brain tissue. Staining of the cells with antibodies specific for fibronectin was observed prior to implantation (FIG. 7, Panel b) and was also observed 5 days after implantation (FIG. 7, Panel c).